



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,459	07/25/2003	David R. Otis JR.	100204707-1	3249

22879 7590 03/29/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

BELT, SAMUEL E

ART UNIT PAPER NUMBER

3746

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/627,459	Applicant(s) OTIS, DAVID R.	
	Examiner Samuel E. Belt	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 5, 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4, & 11-13 recite the limitation "wherein the rotor control mechanism" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "a control mechanism" in line 2, it is unclear as to whether applicant meant to state "said mechanism" if not please clarify by specifying the mechanism. There is insufficient antecedent basis for this limitation in the claim.

Clarification and/or correction are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 3746

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8, 11, & 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Stenner (US Patent 4,600,366).

Stenner discloses a pump having a rotary portion which compels the movement of a fluid by peristaltic compression of resilient tubing containing the fluid, a roller assembly comprising the following: at least one roller mounted in the rotary portion of the pump (column 1, line 24+) for contact with the resilient tubing, the at least one roller having a range of rotation in contact with the tubing during pump operation; and a roller control mechanism (Figure 1, item 10) adapted and constructed to stop the at least one roller at a single, predetermined location on the tubing when the pump operation is stopped; wherein the at least one roller comprises two rollers (column 1, line 24+); wherein the rotor control mechanism comprises a slip clutch on which the rotors are mounted (Figure 1, item 16, See **notes**).

(Notes:

In regard to claim 5, the applicants "adapted & constructed to" statement is not a positive limitation but only require the ability to so perform.

In regard to claim 4, plate 14 is being considered as a rotor.

End Notes)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stenner (US Patent 4,600,366) in view of Lang et al. (US Patent 5,133,440) and Nielson (US Patent 3,636,570). Stenner sets forth a device as described above, which is substantially analogous to the claimed invention. The Stenner device differs from the claimed invention in that there is no explicit teaching of a stop-pin and stop bar arrangement. Lang et al. teach a rotary stop mechanism having a stop-pin (Figure 3, item 26) and a stop (Figure 2, item 32). Nielson teaches a rotary stop bar (Figure 17, item 300).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the Stenner device by using the stop pin and stop bar arrangement as taught by Lang et al. and Nielson in order to better control of the positioning of the shaft when it's rotation is stopped.

Claims 7, 9-10, 12, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stenner (US Patent 4,600,366) in view of Weishaar (US Patent 3,799,702).

In regard to claims 7, 14, and 20 Stenner sets forth a device as described above, which is substantially analogous to the claimed invention. The Stenner device differs from the claimed invention in that there is no explicit teaching of a flow control mechanism adapted and constructed to compensate for localized tubing collapse. Weishaar teach a roller pump having a control means, which uses a pressure measurement device for controlling the motor speed (Figure 1, items 10 & 11).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the Stenner device by using the control device as taught by Weishaar in order to better control the speed of the motor and provide a more efficient pumping system.

In regards to Claims 9-10, &12 Stenner sets forth a device as described above, which is substantially analogous to the claimed invention. The Stenner device differs from the claimed invention in that there is no explicit teaching of rollers being mounted 180 degrees from one another. However, Stenner does disclose that a plurality of spaced rollers can be used in a peristaltic pump (column 1, line 23+). It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the Stenner device by using two rollers that are equally spaced apart for pumping a fluid in a peristaltic pump, as it is a conventional configuration used in the art.

Alternately Weishaar teaches a roller pump having a 2-roller configuration in which the 2-rollers are mounted 180 degrees from one another (Figure 1, items 6 & 7).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to modify the Stenner device by using two rollers that are equally spaced apart as taught by Weishaar, for pumping a fluid in a peristaltic pump, as it is a conventional configuration used in the art.


Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel E. Belt whose telephone number is (571) 272-7820. The examiner can normally be reached on M-F, 8 - 4:30EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe can be reached on (571) 272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEB


TAE JUN KIM
PRIMARY EXAMINER


Samuel E. Belt
03/22/2006